

U.S. Patent Application of Nosov et al.
Serial No.: 09/509,256 – Art Unit: 1771

IN THE SPECIFICATION:

A Substitute Specification is provided with this Amendment, in two version: one without any marking of additions and deletions, and one with all additions and deletions marked.

IN THE CLAIMS:

Please amend claims 1-3, and add new claim 6, as follows. Note that the amended claims as given below do not mark additions and deletions. These additions and deletions are marked in Attachment 2, which follows this Amendment.

1. (Amended) An X-ray absorbing material comprising a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, wherein said filler material is a poly-dispersed mixture that has been segregated by intermixing and that contains metallic particles having a size between 10^{-9} and 10^{-3} m fixed in a textile base that serves as a matrix; and wherein the particles are bonded to the surface of and embedded in said textile base, and where the density of the X-ray absorbing material as a whole, given that the X-ray absorbing properties are equal to those of the material used for the particles of the X-ray absorbing filler, is defined by the relation:

$\rho_m = (0.01 - 0.20)\rho_p,$

where ρ_m is the density of the X-ray absorbing material as a whole, and

ρ_p is the density of the material used for the particles of the X-ray absorbing filler.

2. (Amended) An X-ray absorbing material comprising a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, where said filler material is a poly-dispersed mixture that has been segregated by intermixing and that contains metallic particles having a size between 10^{-9} and 10^{-3} m, wherein said particles are surrounded by the volume of a matrix that is made of at least one compound that solidifies under atmospheric pressure, or made of a composition derived from a base of the same compound, and the total mass of the segregated, poly-dispersed mixture consisting of particles of the X-ray absorbing filler is defined by the relation:

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$$M = (0.05 - 0.5) m,$$

where M is the total mass of the segregated poly-dispersed mixture consisting of the X-ray absorbing filler particles, and

m is the equivalent mass of the X-ray absorbing filler material equal in protective properties to mass M.

3. (Amended) An X-ray absorbing material comprising a matrix with a fixed X-ray absorbing metal-containing filler in the form of dispersed particles, where said filler material is a poly-dispersed mixture containing metallic particles having a size between 10^{-9} and 10^{-3} m, wherein said particles are bonded to an intermediate substrate surrounded by the volume of the matrix formed of at least one compound that solidifies under pressure.

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6. (New) An X-ray absorbing material comprising a matrix with a fixed X-ray